

REMARKS

The foregoing amendments and these remarks are in response to the Office Action dated January 21, 2009. At the time of the Office Action, claims 1-8 were pending in the application. Claims 9-15 have been added. No new matter has been added. At the request of the Office Action, a clean version of the claims is attached hereto. The rejections are discussed in more detail below.

Amendments to the claims are supported at least in paragraphs 60, 72, 83 and 262 of the specification:

When the user inputs input data, the input data is added to the real-number data (step S13). Next, the real-number data is substituted for the variables in the variable program, and the variable program is executed to create graphic data while interpreting the variable program by the interpreter-type programming language of the computing section 26 (step S14). Furthermore, display data is created from the created graphic data (step S15).

The user merely selects desired parts from the parts list displayed on the screen, thereby making it possible to acquire graphic data corresponding to the parts. In addition, the user can input variable data such as parts dimensional value in advance, making it possible to obtain graphic data on special parts in accordance with a simplified procedure. Further, the client computer 2 substitutes variable data for each variable in the variable program, thereby producing graphic data. Thus, graphic data having different dimensions can be easily produced, and graphic data with its high precision and high reliability can be provided.

The variable program files are divided by the extensions PR0 (front view), PR1 (side view), PR2 (top view) and PR3 (cross-sectional according to the projected surfaces of the drawing, and the respective file names become B010302.PR0, B010302.PR1, B010302.PR2 and B010302.PR3. Normally, for one part, there is one real-number data file and a maximum of four program variable files. The code number of the part listed in the real-number data file B010302.DT is displayed in the fourth part table that is displayed in the display area W6 shown in FIG. 5. The reason that the variable program files are divided and recorded according to the respective projected surfaces is that when calling up a part from CAD that is recorded in the part library, and pasting it and using it directly on a CAD drawing that is being created, other projected surfaces become obstructive.

Furthermore, since the variable program is created using a interpreter-type programming language, it is possible to register the variable program in a

general-purpose database in realtime by way of a network such as the Internet without having to recompile it, and the registered variable program can be reflected instantaneously on the side of the user by way of the network such as the Internet. Moreover, with the method of separating this kind of variable program from the program data transmitting section on the side of the server computer of this invention, and stored as data, even without using a plug-and-play method or wrapper technique, there is no need to recompile the program of the program data transmitting section or to stop the server every time a variable program is added or updated, so it is possible to simplify development and maintenance of the program for the program data transmitting section and lower costs. Also, it is possible to save a large quantity of variable programs.

I. CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-8 are rejected under 35 USC §102(b) as being anticipated by Saha et al. ("Web-Based Distributed VLSI Design," hereafter "Saha"). Further, claims 1-8 under 35 USC §102(b) as being anticipated by Geppert et al. ("IC Design on the World Wide Web," hereafter "Geppert"). For the reasons described below, neither Saha, nor Geppert, describe each and every element of independent claims 1 or 2.

Claim 1 includes the features of the client computer receiving input of one or more additional numerical values and substituting the additional numerical values into the variables of the specified variable program, where the client computer executes the program to create a modified CAD part graphic data, where the client computer displays the modified CAD part graphic data which is representative of a CAD generated part, and where the additional numerical values are associated with a dimension of the CAD generated part whereby a change to the additional numerical values results in a change to the dimension of the CAD generated part. Saha concerns a Web-based distributed VLSI (Very Large Scale Integration) design, which is the process of creating integrated circuits by combining thousands of transistor-based circuits into a simple chip. VLSI systems require distributed design and verification methodology due to the diverse expertise required at various areas. The Saha system requires tools and information which are accessible through the Internet. Saha does not disclose or suggest the above-described features of claim 1.

The Office Action at page 2 asserts that the "WebTop" feature of Saha is an editor which supports hierarchical cells of design in the cells can constitute structural and schematic views of a circuit design, and which can be accessed and modified. Saha describes users having the ability to modify cells in their respective directories while only the owner of the cells has the permission to modify or delete the global cell. Saha then makes clear that "WebTop uses [] object-web architecture [] for distributed tool integration" which is shown as follows:

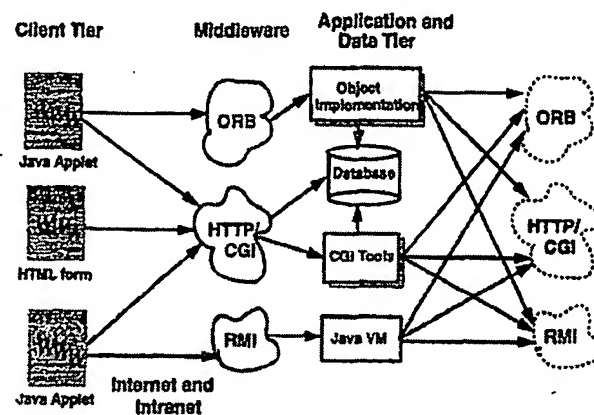


Figure 3: Object-Web Architecture for Distributed Computing

Applicants respectfully assert that Saha does not disclose or suggest receiving input of one or more additional numerical values and substituting the additional numerical values into the variables of the specified variable program, where execution of the program then creates a modified CAD part graphic data and results in presentation of a CAD generated part. Moreover, Saha does not disclose or suggest the additional numerical values being associated with a dimension of the CAD generated part whereby a change to the additional numerical values results in a change to the dimension of the CAD generated part. Saha describes the use of Java applet tools for circuit simulation:

WebTop uses the object-web architecture in Figure 3 for distributed tool integration. CAD tools in the application tier can be either CGI programs, Java objects or tools wrapped around as CORBA objects. The standard specification of RMI and CORBA makes it very easy to make transparent calls to tools which communicate using RMI or CORBA. Tools can also be CGI programs and could be integrated using the framework described in Section 4.

WebTop has interfaces to different Web tools and demonstrates how an Java applet tool could utilize another CGI based tool on the Web. We have developed a CGI based point tool WebSpice at <http://apsara.mit.edu/cgi-bin/spice/spice.pl>, which provides Web access to the circuit simulator HSPICE. WebSpice is an independent web tool and can be accessed through the HTML form at:

<http://apsara.mit.edu/spice.html>. Using WebTop, the user can extract a design schematic into a SPICE netlist. WebTop, which is an applet then submits the netlist to WebSpice as multipart/form-data conforming to the BIS of WebSpice. WebSpice simulates the spice netlist and sends back the results of simulation to the applet as URL. The applet then displays the resulting URL in the browser.

However, Saha does not receive input of one or more additional numerical values and substitute the additional numerical values into the variables of the specified variable program, where execution of the program then creates a modified CAD part graphic data and results in presentation of a CAD generated part. Additionally, Saha does not provide for a change to the inputted additional numerical values resulting in a change to the dimension of the CAD generated part.

Claim 2 includes the features of the client computer receiving input of one or more additional numerical values and substituting the additional numerical values into the variables of the specified variable program, where the client computer executes the program to create a modified CAD part graphic data, where the client computer displays the modified CAD part graphic data which is representative of a CAD generated part, and where the additional numerical values are associated with a shape of the CAD generated part whereby a change to the additional numerical values results in a change to the shape of the CAD generated part.

Saha describes the use of a "WebTop" feature that is an editor which supports hierarchical cells of design in the cells can constitute structural and schematic views of a circuit design, and which can be accessed and modified. Saha describes users having the ability to modify cells in their respective directories while only the owner of the cells has the permission to modify or delete the global cell. Saha then makes clear that "WebTop uses [] object-web architecture [] for distributed tool integration." However, Saha does not disclose or suggest the above-described features of claim 2.

Claim 9 includes the features of presenting a plurality of dimensions that define the first part; receiving an input for each of the plurality of dimensions; substituting the input into the variables of the variable programs and executing the variable programs to generate second graphic data, where the substitution and execution are performed by the client computer without compiling of the variable programs; and displaying a second part at the client computer based on the generated second graphic data, wherein the first and second parts have different shape. Saha describes the use of a "WebTop" feature that is an editor which supports hierarchical cells of design in the cells can constitute structural and schematic views of a circuit design, and which can be accessed and modified. Saha describes users having the ability to modify cells in their respective directories while only the owner of the cells has the permission to modify or delete the global cell. Saha then makes clear that "WebTop uses [] object-web architecture [] for distributed tool integration." However, Saha does not disclose or suggest the above-described features of claim 9.

Claims 3-8 and 10-15 depend from claims 1, 2 and 9, and thus are also allowable over Saha.

Claim 1 includes the features of the client computer receiving input of one or more additional numerical values and substituting the additional numerical values into the variables of the specified variable program, where the client computer executes the program to create a modified CAD part graphic data, where the client computer displays the modified CAD part graphic data which is representative of a CAD generated part, and where the additional

numerical values are associated with a dimension of the CAD generated part whereby a change to the additional numerical values results in a change to the dimension of the CAD generated part. Geppert describes an IC Design method in which the parts are searched using many methods such as search engines. The parts found are for ordering. In addition it has the options to allow checking for availabilities. This clearly shows that the parts stored are found in order to place orders. Geppert does not disclose or suggest the above-described features of claim 1.

The Office Action at page 2 asserts that the below system of Geppert allows a remote user to "graphically diagram the IC being designed":

National Semiconductor
 SYSTEM DIAGRAMS

Cordless Phone-Baset/Handset

The diagram shows a system architecture for a cordless phone. It includes a Receiver, a TX/RX Coil, a Transmitter Chain, a 3 UP DSP, a COMPLETE IC, a Speaker, a Microphone, a PLV, a REL LINE, a CHARGE, and a DC ADAPTER. The components are interconnected to show the flow of signals and power.

Availability, Models, Samples & Pricing

Part Number	Grade	Package		Status	Models		Samples & Small Qty Orders	Budgetary Pricing		Std Pack Size	Package Marking
		Type	# pins		SPICE	LBIS		Quantity	\$US ea		
COPC912-XXXX/WM	Commercial	SOP	20	Production	N/A	N/A	Samples		N/A	tube of 36	{logo}{asm}{date-code(yyvv)}{dis-run(2)} COPC912-XXXX/WM
COPC912-XXXX/N	Commercial	MDIP	20	Production	N/A	N/A			N/A	tube of 18	{logo}{asm}{date-code(yyvv)}{dis-run(2)} COPC912-XXXX/N

Navigation buttons: QUICK SEARCH, PARAMETRIC SEARCH, SYSTEM DIAGRAMS, PRODUCT CATALOG, HOME.

[5] One of the search options on the Web site of National Semiconductor Corp., Santa Clara, Calif., is the system diagram [top]. Clicking on any of the components shown brings up a list of part numbers that could serve as that component. Selecting any part from the list brings up a table with more information about the part and its availability.

The Office Action asserts that the Geppert system of FIG. 5 describes remote designing in the following paragraph:

The avenues for distributed design being explored by such projects as Vela and WELD appeal to Ryan, though he is not sure what the legal issues are. Still, if design tools could be run remotely, it might prove unnecessary to maintain every piece of software at every location. "You want to be able to globally manage your software resources," he said, "especially since design tools are more expensive than the machines that they run on these days."

The lives of the engineers

Web- and Internet-based information and project-management systems are already exerting an influence on the way electronic systems are designed, and push will come to shove as such systems proliferate. The consequences

However, Geppert is merely describing the potential for distributed design. FIG. 5 of Geppert is a search engine for retrieving parts where "[s]electing any part from the list brings up a table with more information about the part and its availability." The Office Action as page 2 asserts that FIG. 5 allows for "the parts [to be] found remotely and then designed client side." Even if FIG. 5 were providing such a system, which Applicants assert it does not, this still would not anticipate the features of claim 1 of receiving input of one or more additional numerical values and substituting the additional numerical values into the variables of the specified variable program, where execution of the program then creates a modified CAD part graphic data and results in presentation of a CAD generated part. Moreover, this also would not anticipate the additional numerical values being associated with a dimension of the CAD generated part whereby a change to the additional numerical values results in a change to the dimension of the CAD generated part.

Claim 2 includes the features of the client computer receiving input of one or more additional numerical values and substituting the additional numerical values into the variables of the specified variable program, where the client computer executes the program to create a modified CAD part graphic data, where the client computer displays the modified CAD part graphic data which is representative of a CAD generated part, and where the additional numerical values are associated with a shape of the CAD generated part whereby a change to the additional numerical values results in a change to the shape of the CAD generated part. Geppert describes a system whereby the parts number, package type, and package pin are used or

substituted into the users web site to aid searching for parts. If the part searched in this way is available, then the Geppert system displays it in a list so the client can view. Geppert does not disclose or suggest the above-described features of claim 2.

Claim 9 includes the features of presenting a plurality of dimensions that define the first part; receiving an input for each of the plurality of dimensions; substituting the input into the variables of the variable programs and executing the variable programs to generate second graphic data, where the substitution and execution are performed by the client computer without compiling of the variable programs; and displaying a second part at the client computer based on the generated second graphic data, wherein the first and second parts have different shape. Geppert describes a system whereby the parts number, package type, and package pin are used or substituted into the users web site to aid searching for parts. If the part searched in this way is available, then the Geppert system displays it in a list so the client can view. Geppert does not disclose or suggest the above-described features of claim 9.

Claims 3-8 and 10-15 depend from claims 1, 2 and 9, and thus are also allowable over Saha.

The present invention as claimed is, therefore, believed to be patentable over the art and the Examiner is requested to withdraw the rejections are respectfully requested.

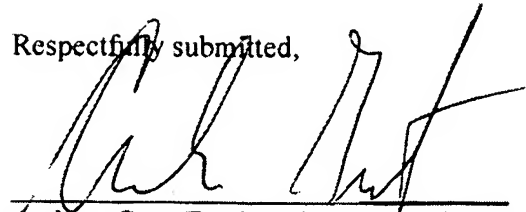
II. CONCLUSION

Applicants have made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicants respectfully request reconsideration and prompt allowance of the pending claims.

Application No: 10/710,376
Reply to Office Action Dated January 21, 2009

Attorney Docket No: 9993-1

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Andrew Gust', is written over a horizontal line.

Date: May 21, 2009

Andrew Gust (Registration No. 47,620)
AKERMAN SENTERFITT
Post Office Box 3188
West Palm Beach, FL 33402-3188
Telephone: (561) 653-5000